

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (*Currently Amended*) A method for echo cancelling in a communication line system, the method comprising:

measuring ^{output} an output transmission voltage and an input^{input} transmission voltage of a hybrid
to determine a ~~the~~ transmission return loss gain in said hybrid; and

adapting tunable passive elements of said ~~a~~ hybrid which forms part of the analog front end of said communications line system, whereby the values of the tunable passive elements are controlled by digital control means⁴ to reduce the transmission return loss gain.

2. (*Currently Amended*) The method according to claim 1, wherein a scaling factor is used for adjusting ~~adapting~~ said tunable passive elements.

3. (*Currently Amended*) The method according to claim 1, wherein when the transmission return loss gain differs from zero, the digital control means adjusts ~~goes through a loop of adaptation~~ of the tunable passive elements until a zero value of said transmission return loss gain is obtained.

4. (*Currently Amended*) The method according to claim 3, wherein a scaling factor (~~k~~) is used for adjusting ~~adapting~~ said tunable passive elements, and said hybrid comprises a hybrid bridge with two branches, each comprising two tunable passive impedances in series, one being a tunable balance impedance, said tunable passive impedances being tuned such that the value of said tunable balance impedance approximates as close as possible the scaled impedance value of the parallel circuit of the line termination resistance in transmission paths of the hybrid bridge and the line impedance.

C 5. (*Currently Amended*) The method according to claim 4, wherein said hybrid comprises a current to voltage converter, the feedback impedances of which being adjusted ~~adapted~~ so as to be equal to said tunable balance impedance.

6. (*Currently Amended*) A device for echo cancelling in a communication line system, comprising:

a hybrid comprising tunable passive elements; and

digital control means coupled to said hybrid, said digital control means controlling the values of said tunable passive elements to reduce a transmission return loss gain in said hybrid, said transmission return loss gain being based upon an output transmission voltage from said hybrid and an input transmission voltage to said hybrid.

7. (*Previously Presented*) The device according to claim 6, wherein said tunable passive elements of said hybrid are scalable by a predetermined scaling factor.

8. (*Previously Presented*) The device according to claim 6, wherein said hybrid comprises a current to voltage converter.

C 9. (*Previously Presented*) The device according to claim 8, said hybrid bridge comprising two branches, each comprising a tunable balance impedance in series with a second tunable impedance.

10. (*Previously Presented*) The device according to claim 9, wherein said tunable balance impedance comprises a first tunable resistor, in parallel with a series connection of a second tunable resistor and a tunable capacitor, and in parallel with a fixed value resistor.

11. (*Previously Presented*) The device according to claim 10, wherein said fixed value resistor has the same resistance value, as the line termination resistors in the transmission paths of the hybrid bridge, scaled with a scaling factor.

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12. (*Previously Presented*) The device according to claim 9, wherein said second tunable impedance in each branch comprises a resistor in series with a tunable capacitor, the value of said resistor being the same as the resistance value of said line termination resistors in the transmission paths of the hybrid bridge, scaled with a scaling factor.

C 13. (*Previously Presented*) The device according to claim 8, wherein said current to voltage converter comprises an operational amplifier with tunable feedback impedances having the same impedance values as said tunable balance impedance.

14. (*Previously Presented*) The device according to claim 6, wherein said digital control means comprises a microprocessor.

15. (*Previously Presented*) The device according to claim 9, wherein said tunable passive elements are part of an integrated circuit.